Ms. Jocelyn Boyd

Chief Clerk and Administrator

Public Service Commission of South Carolina 101 Executive Center Drive, Suite 100 Columbia, SC 29210

RE: Piedmont Natural Gas Company, Inc. Notice of New Natural Gas Construction Project Docket No. 2012-278-G

Dear Ms. Boyd:

December 18th, 2020

The Upstate Chapter of the Climate Reality Project wishes to comment on Piedmont Natural Gas Company, Inc.'s (PNG) notice to the Commission on July 7, 2020 regarding the Line 201 Extension project for Greenville County. Climate Reality is an international nonprofit environmental organization that strives to educate the public and regulatory community to the urgency of carbon emission reductions. We have 600 members in the Upstate including many residents in Travelers Rest and Taylors.

The Upstate Chapter requests the contents of this letter be attached to the record. Order No. 2020-752 requires your office to issue notice of a generic proceeding on PNG's 2020 construction notices. While comments are not conventional in the context of this docket, there is no other way to add input on this expensive capital project prior to approval and construction and prior to a rate case.

## Our concerns are the following:

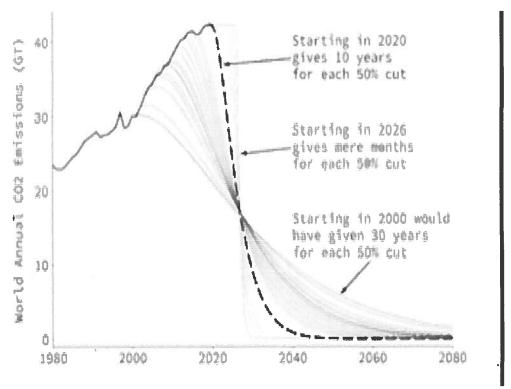
- 1. the pipeline project as a whole
- 2. the lack of requirement for public input for a project of this nature before it is approved
- 3. the Line 201 project is an unadvisable expenditure of capital by Piedmont Gas that will result in unwanted increases in consumer rates and in a stranded asset paid for by rate payers
- 4. the project will also add committed carbon dioxide emissions that the environment can ill afford

The Intergovernmental Panel on Climate Change (IPCC), the United Nations body for assessing the science related to climate change, has set a global goal for reaching net-zero carbon emissions by 2050. This is a goal Duke Energy, Piedmont Gas' parent company, has endorsed. The net-zero carbon emissions goal is based on the IPCC goal of keeping the average global temperature increase to 1.5°C or less. This requires that we not only achieve net-zero carbon emissions, but also respect the carbon budget. The carbon budget is the amount of carbon we can add to the atmosphere without driving the average global temperature increase to greater than 1.5°C. The 1,5°C upper limit was set based on concerns for climate disasters and natural tipping points, like the uncontrollable melting of the Greenland icecap. Carbon emissions are measured in carbon dioxide equivalents (CO2e) which are the sum of all greenhouse gases weighted by their relative impact on warming. According to the IPCC, the CO2e budget, for a 66% chance of success, at the beginning of 2020 was 335 billion tons (BT). Global economies, even with a reduction due to the pandemic, spent 40 BT of the carbon budget in 2020. Without changing the current rate of emissions the world will "over spend" the carbon budget in approximately 8 more years and will overshoot the 1.5°C goal. It is clear that if we are to succeed in the goal of limiting the world to a 1.5°C increase we must follow a "glide path" (Figure 1) that rapidly reduces CO2e emissions.

Without drastic action we will exceed the carbon budget before reaching net-zero carbon emissions.



Figure 1. "Glide Path" Model to Reduce Carbon Emissions



The paths are calculated for every year from 2000 - 2026.

The "glide path" to net-zero carbon emissions must not exceed the carbon budget.

- If transition had started in the year **2000**, the required CO2e emissions cut would have been: **50% every 30 years**.
- If transition had started in the year **2020**, the required CO2e emissions cut would have been: **50% every 10 years**.
- If we wait until 2026 to get started, we will need to cut usage by 50% in mere months.

The "glide path" will now require cutting global CO2e emissions by 50% in the first 10 years. We must focus on emissions we already know how to eliminate. This will allow time for science and technology to effectively address emissions that are more difficult to reduce. Emissions we know how to eliminate at the present time account for about half of our total emissions (Table 1). While it appears the timelines in Tables 1 and 2 would achieve the goal by 2040, in reality there would be less than 2 BT of the carbon budget remaining in 2040. The small reserve of remaining carbon would be required for emissions issues that remain unresolved.

# Areas of focus, according to decade, based on level of confidence in solutions and meeting the current required glide path

Table 1.

#### 2020-2030

Currently Know How to Address	Global CO2e in Billions of Tons
Electricity and Heat	12.8 BT (30%)
Transportation	6.7 BT (16%)
Land Use	2.7 BT (6%)
Total	22.2 BT (53%)

Table 2.

### 2030-2040

Need Better Technology/ Understanding	Global CO2e in Billions of Tons
Manufacturing	5.2 BT (12%)
Agriculture	4.9 BT (12%)
Fugitive Emissions	2.5 BT (6%)
Industrial Processes	2.4 BT (6%)
Buildings	2.3 BT (5%)
Waste	1.3 BT (3%)
Other	1.2 BT (3%)
Total	19.8 BT (47%)

In order to meet the required glide path to zero-carbon emissions by 2050, Climate Reality supports a 2025 moratorium on natural gas hook-ups for new construction with a goal to convert all existing buildings and homes to fully electric by 2030. In such a scenario the pay-back period to rate payers for the Line 201 extension is extremely limited.

In Greenville County electricity and heating are expected to account for approximately 30% of total energy usage. We already have economically advantageous solutions such as solar power. The quickest way to address carbon emissions is to convert all energy usage to electricity and convert the sources of electric power to net-zero carbon emissions production.

Climate Reality wholly supports and endorses the position Upstate Forever has taken regarding the Line 201 extension project. (see letter filed by Upstate Forever with the PSC

on November 19, 2020). As the move to net-zero carbon emissions homes, businesses, and industry proceeds, there will be no need for natural gas supply lines at all.

# The time has come to stop investment in fossil fuel infrastructure.

Dr. Gary Harbour Climate Reality Upstate Chapter Travelers Rest, SC

CC:

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Or. Han Harhour